What is claimed is:

1. A method for registration of carbon sinks comprising renewable energy and emission reduction systems, wherein a carbon sink represents an asset in an account, the method comprising:

(a) receiving information to identify a customer account;

(b) receiving input to identify type of carbon sink;

(c) receiving input data used to calculate emission reduction provided by the carbon sink;

(d) calculating an emission reduction credit (ERC) value representative of the renewable energy and emission reduction provided by the carbon sink;

(e) crediting a percentage of the ERC value to the customer account.

2. The method of claim 1, wherein the step (b) of receiving input to identify type of carbon sink comprises selecting type of carbon sink from one of the following:

(i) solar thermal;

(ii) photovoltaic;

(iii) micro-hydro;

(iv) wind turbine; and

(v) carbon sequestration.

3. The method of claim 1 further comprising the step of receiving data representative of the location of the carbon sink and indexing the information using a Global Positioning System (GPS).

4. The method of claim 1 further comprising the step of receiving a selection of type of accreditation level from a plurality of accreditation levels, wherein the selected level determines a particular registration fee and a particular percentage of ERC value that will be credited to the customer account.

5. The method of claim 4 wherein the percentage of ERC value not credited to the customer account is divided according to accreditation level and credited to a plurality of funds comprising an insurance fund to insure the registered carbon sink in accordance with certain events which may affect its emission reductions, a yearly administrative fund to apply to the costs of operating the registration system, a certifier's fund to apply to the costs of certifying the sink, and a discount fund which acts as an uncertainty factor for ERC calculations.

6. The method of claim 1, wherein the step (c) of receiving input data used to calculate emission reduction provided by the carbon sink comprises receiving specific parameters for the type of sink selected.

7. The method of claim 1 further comprising the step of constructing a virtual box representing the yearly emissions reductions of the carbon sink to ensure that ERCs in a given time period and given place are assigned only once, the box assigned to geographical coordinates of the sink, wherein the box expresses the amount of GHGs reduced by gram and in cubic centimeters of the carbon sink.

8. The method of claim 1 further comprising the step of assigning identification tags to the ERC values, the tags comprising one or more of location of sink, owner of sink, certifier of sink, and digital record of sink.

9. The method of claim 1 further comprising the step of donating a percentage of the ERC value credited to the customer account to a separate entity.

10. The method of claim 1 further comprising the step of exchanging ERC values in the customer account for monetary assets.

11. The method of claim 10, wherein the step of exchanging comprises:

(a) storing ERC values tagged with an identification unique to the carbon sink in a pool pending sale; and

(b) transmitting monetary assets to the customer account upon purchase of ERC value from pool.

12. A method for registration of a carbon source, wherein a carbon source represents a liability in an account, comprising:

(a) receiving information to identify customer account;

(b) receiving input to identify type of carbon source;

(c) receiving input data used to calculate energy consumption and emissions output of the carbon source;

(d) calculating greenhouse gas (GHG) emissions value produced by the carbon source; and

(e) debiting the GHG value from the customer account.

13. The method of claim 12, wherein the step (b) of receiving input to identify type of carbon source comprises selecting type of carbon source from one of the following:

(i) vehicles;

(ii) structures;

(iii) travel;

(iv) manufacture of products; and

(v) providing services.

14. The method of claim 12, wherein the step (c) of receiving input data used to calculate energy consumption and emissions output of the carbon source comprises receiving specific parameters for the type of source selected.

15. The method of claim 12, further comprising the step of assigning a monetary liability to the GHG value.

16. The method of claim 15, further comprising the steps of

(i) accepting payment from the customer;

(ii) using the payment to purchase ERC values associated with a carbon sink, said ERC values representing an asset in an account;

(iii) crediting the ERC values as assets against the monetary liability assigned to the GHG value, whereby the GHG value in the customer account is reduced accordingly.

17. The method of claim 16, further comprising the steps of tagging the ERC values purchased with the identification of the carbon sink associated therewith and associating the carbon sink identification with the carbon source of the customer.

18. A method for tracking emission reduction credits between sellers and purchasers, wherein the emission reduction credits assigned to a carbon sink represent an asset in an account, comprising:

(a) registering for a seller a carbon sink comprising renewable energy and emission reduction systems wherein an emission reduction credit (ERC) value representative of the renewable energy and emission reduction provided by the carbon sink is assigned to the carbon sink;

(b) assigning a unique identification to the emission reduction credit (ERC) value of the seller;

(c) making the ERC value for the carbon sink available for purchase;

(d) receiving a purchase request from a purchaser for the ERC value;

(e) matching the unique identification to an identification of the purchaser;

(f) crediting the ERC value to an account of the purchaser as an asset.

19. The method of claim 18, wherein if the account of the purchaser includes greenhouse gas (GHG) emissions values produced by a carbon source of the purchaser, wherein a carbon source represents a liability in an account, the method further comprising the steps of

(i) balancing the liabilities of the GHG values in the account with the assets of the ERC value purchased; and

(ii) associating the unique identification of the ERC value from the carbon sink to a unique identification of the carbon source of the purchaser.

20. The method of claim 18 wherein step (c) of making the ERC value for the carbon sink available for purchase comprises pooling the ERC value in a pool with other ERC values from a plurality of sellers having ERC values associated with their carbon sinks.

21. The method of claim 20, prior to step (d) of receiving a purchase request from a purchaser for the ERC value, further comprising the steps of

(i) searching the pool for an ERC value associated with a specific carbon sink substantially matching the search criteria; and

(ii) displaying the results of the search.

22. The method of claim 18 further comprising the step of receiving a fee from the purchaser in the form of a percentage of the ERC value prior to crediting the ERC value to an account of the purchaser.

23. The method of claim 1 further comprising receiving information regarding boundaries, ownership, land use management, and community impact for biological and geological carbon sinks.

24. The method of claim 13 wherein, if vehicle is selected as type of carbon source, further comprising the steps of:

(i) receiving input data for at least one of make, model, variants, year, VIN#, time period, annual mileage;

(ii) calculating GHG value for the vehicle in accordance with input data received.

25. The method of claim 13 wherein, if structure is selected as type of carbon source, further comprising the steps of:

(i) receiving input data for at least one of power consumption, propane consumption, gasoline consumption;

(ii) calculating GHG value for the structure in accordance with input data received.

26. The method of claim 25, wherein if structure is a company, further comprising the step of addition to the GHG value emissions produced by vehicles owned by the company.

27. The method of claim 13 wherein, if travel is selected as type of carbon source, further comprising the steps of:

(i) receiving input data for at least one of arrival and departure points, method of travel, type of transportation, travel dates;

(ii) calculating GHG value for the travel in accordance with input data received.

28. The method of claim 13 wherein, if manufacture of products is selected as type of carbon source, further comprising the steps of:

(i) receiving input data representative of emissions produced during the manufacture and distribution of a product;

(ii) calculating GHG value for the manufacture of the product in accordance with input data received.

29. The method of claim 28 further comprising the steps of:

(iii) purchasing an amount of ERC value sufficient to offset the GHG value from a seller who has registered a carbon sink comprising renewable energy and emission reduction systems, wherein an emission reduction credit (ERC) value is representative of the renewable energy and emission reduction provided by the carbon sink;

(iv) certifying the product as GHG neutral as a result of the offset.

30. The method of claim 29 wherein the product is gasoline.

31. The method of claim 13 wherein, if providing services is selected as type of carbon source, further comprising the steps of:

(i) receiving input data representative of emissions produced during the provision of a service;

(ii) calculating GHG value for the provision of the service in accordance with input data received.

32. The method of claim 31 further comprising the steps of:

(iii) purchasing an amount of ERC value sufficient to offset the GHG value from a seller who has registered a carbon sink comprising renewable energy and emission reduction systems, wherein an emission reduction credit (ERC) value is representative of the renewable energy and emission reduction provided by the carbon sink;

(iv) certifying the service as GHG neutral as a result of the offset.

33. A computer system for registration of carbon sinks comprising renewable energy and emission reduction systems, wherein a carbon sink represents an asset in an account, the system comprising:

input device for receiving information to identify a customer account; receiving input to identify type of carbon sink; and receiving input data used to calculate emission reduction provided by the carbon sink;

processor for calculating an emission reduction credit (ERC) value representative of the renewable energy and emission reduction provided by the carbon sink; and crediting a percentage of the ERC value to the customer account associated with the carbon sink; and

display for displaying customer accounts.

34. The computer system of claim 33 further comprising a system for registration of a carbon source, wherein a carbon source represents a liability in an account, wherein said input device further receives input to identify type of carbon source; and receives input data used to calculate energy consumption and emissions output of the carbon source; and wherein said processor

calculates a greenhouse gas (GHG) emissions value produced by the carbon source; and debits the GHG value from a specific customer account associated with the carbon source.

35. A system for tracking emission reduction credits between sellers and purchasers, wherein the emission reduction credits assigned to a carbon sink represent an asset in an account, comprising a computer processor programmed to:

(a) register for a seller a carbon sink comprising renewable energy and emission reduction systems wherein an emission reduction credit (ERC) value representative of the renewable energy and emission reduction provided by the carbon sink is assigned to the carbon sink;

(b) assign a unique identification to the emission reduction credit (ERC) value of the seller;

(c) make the ERC value for the carbon sink available for purchase;

(d) receive a purchase request from a purchaser for the ERC value;

(e) match the unique identification to an identification of the purchaser; and

(f) credit the ERC value to an account of the purchaser as an asset.

36. A computer readable media containing program instructions for displaying data on a display device of a computer system, the data being obtained from tables in a database associated with the computer system, the computer readable media comprising computer program code for implementing the steps of claim 1.

37. A computer readable media containing program instructions for displaying data on a display device of a computer system, the data being obtained from tables in a database associated with the computer system, the computer readable media comprising computer program code for implementing the steps of claim 12.

38. A computer readable media containing program instructions for displaying data on a display device of a computer system, the data being obtained from tables in a database associated with the computer system, the computer readable media comprising computer program code for implementing the steps of claim 18.

39. A computerized storage and retrieval system for exchanging emission reduction credits (ERC) values associated with a carbon sink, representing an asset in an account, for GHG values associated with a carbon source, representing a liability in an account, comprising a data storage means for storing data in a relational database wherein the database comprises tables, each table having a domain of at least one attribute in common with at least one other table, the tables comprising:

at least one table for storing all ERC values available for purchase.

40. The system of claim 39 further comprising at least one of the following tables:

at least one table for storing amount of carbon in a transaction, the source device, the sink, and the entities involved;

at least one table for recording results of auditing for a GHG activity used for statistical information;

at least one table for storing all information about the GreenHouse Gases (GHG) and other emissions the system tracks and the current price for bank owned credits;

at least one table for storing percentage breakdown of ERCs among various participants; and

at least one table for storing details of application for carbon sequestration/ sink accreditation, auditing and ERC generation.

41. A method for mapping GHG emissions information using various parameters to aid in the management of the transfer of GHG reductions to offset emissions by creating a volumetric global positioning system timestamp (VGT) comprising:

recording GHG activity including data indicative of location, address, GPS, elevation, GHG parameters and time frame of event;

creating a Volumetric GPS Timestamp (VGT) as a virtual box representing the emission or reduction volume of a GHG;

associating the VGT box with a discreetly defined space on planet earth, using the GPS and elevation coordinates anchoring the bottom center of the VGT box, wherein the VGT box serves as a marker, aiding discovery of emission and reduction information introduced that has the same time

frame, location, or volume; and

projecting and transposing 'empty' boxes on top of full boxes to manage the transfer of GHG reductions to offset emissions.

42. The method of claim 41, further comprising:

comparing emissions impact using temperature as a factor comprising:

(a) charting the volume of one ton CO2 as it becomes lager over time as a result of increasing temperature, which expands the volume of any given gas;

(b) using the mean temperature as the baseline by averaging the land, air and sea surface temperatures of planet earth for a period of years;

(c) calculating the increase in temperature from that baseline which expands the CO2 VGT box, and

(d) calculating the relative increase in size used to compare the value of current action versus future action while keeping pressure constant at 760 torr in the equation V $\propto$ T.

43. The method of claim 41 further comprising calculating the proportion clean and dirty air generated as a result of a GHG activity by

(a) establishing VGT by combining location, elevation, time fame, GHG parameters and time frame of GHG activity;

(b) using resulting VGT as the base to calculate the VGT of Oxygen and other molecules consumed or freed up by GHG activity;

(c) expressing the amount of "clean air" lost or gained from the GHG activity.